§ 127.017

(ii) To the same Coast Guard official who heard the oral presentation.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 96-026, 61 FR 33665, June 28, 1996; CGD 97-023, 62 FR 33363, June 19, 1997; USCG-2002-12471, 67 FR 41332, June 18, 2002; USCG-2010-0351, 75 FR 36283, June 25, 2010]

§127.017 Alternatives.

- (a) The COTP may allow alternative procedures, methods, or equipment standards to be used by an operator instead of any requirements in this part if—
- (1) The operator submits a written request for the alternative at least 30 days before facility operations under the alternative would begin, unless the COTP authorizes a shorter time; and
- (2) The alternative provides at least the same degree of safety provided by the regulations in this part.
- (b) The COTP approves or disapproves any alternative requested under paragraph (a) of this section—
 - (1) In writing; or
- (2) Orally, with subsequent written confirmation.

§ 127.019 Operations Manual and Emergency Manual: Procedures for examination.

- (a) The owner or operator of an active existing facility shall submit two copies of the *Operations Manual* and of the *Emergency Manual* to the Captain of the Port of the zone in which the facility is located.
- (b) At least 30 days before transferring LHG or LNG, the owner or operator of a new or an inactive existing facility shall submit two copies of the Operations Manual and of the Emergency Manual to the Captain of the Port of the zone in which the facility is located, unless the manuals have been examined and there have been no changes since that examination.
- (c) If the COTP finds that the *Operations Manual* meets §127.305 or §127.1305 and that the Emergency Manual meets §127.307 or §127.1307, the Captain of the Port returns a copy to the owner or operator marked "Examined by the Coast Guard".
- (d) If the COTP finds that the *Operations Manual* or the *Emergency Manual* does not meet this part, the Captain of the Port returns the manual with an

explanation of why it does not meet this part.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39795, Aug. 3, 1995]

Subpart B—Waterfront Facilities Handling Liquefied Natural Gas

§ 127.101 Design and construction: General.

The marine transfer area for LNG must meet the following criteria in NFPA 59A:

- (a) Chapter 2, Sections 2-1.2 and 2-3.
- (b) Chapter 4, Section 4-1.3.
- (c) Chapter 6.
- (d) Chapter 7, Sections 7-6 and 7-7.
- (e) Chapter 8, except Sections 8–3, 8–5 and 8–7.2.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39795, Aug. 3, 1995]

§127.103 Piers and wharves.

- (a) If the waterfront facility handling LNG is in a region subject to earthquakes, the piers and wharves must be designed to resist earthquake forces.
- (b) Substructures, except moorings and breasting dolphins, that support or are within 5 meters (16.4 feet) of any pipe or equipment containing LNG, or are within 15 meters (49.2 feet) of a loading flange, must—
 - (1) Be made of concrete or steel; and
- (2) Have a fire endurance rating of not less than two hours.
- (c) LNG or LPG storage tanks must have the minimum volume necessary for—
 - (1) Surge protection;
 - (2) Pump suction supply; or
 - (3) Other process needs.

[CGD 78–038, 53 FR 3376, Feb. 7, 1988, as amended at CGD 88–049, 60 FR 39796, Aug. 3, 1995]

§ 127.105 Layout and spacing of marine transfer area for LNG.

- (a) LNG impounding spaces must be located so that the heat flux from a fire over the impounding spaces does not cause structural damage to an LNG vessel moored or berthed at the waterfront facility handling LNG.
- (b) Each LNG loading flange must be located at least 300 meters (984.3 feet)

Coast Guard, DHS § 127.201

from the following which are primarily intended for the use of the general public or railways:

- (1) Each bridge crossing a navigable waterway.
- (2) Each entrance to any tunnel under a navigable waterway.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39796, Aug. 3, 1995]

§ 127.107 Electrical power systems.

- (a) The electrical power system must have a power source and a separate emergency power source, so that failure of one source does not affect the capability of the other source. The system must meet the National Electrical Code, NFPA 70.
- (b) The emergency power source must provide enough power for the operation of the—
 - (1) Emergency shutdown system;
 - (2) Communications equipment;
 - (3) Firefighting equipment; and
 - (4) Emergency lighting.
- (c) If an auxiliary generator is used as an emergency power source, it must meet Section 700–12 of NFPA 70.

§127.109 Lighting systems.

- (a) The marine transfer area for LNG must have a lighting system and separate emergency lighting.
- (b) All outdoor lighting must be located or shielded so that it is not confused with any aids to navigation and does not interfere with navigation on the adjacent waterways.
- (c) The lighting system must provide an average illumination on a horizontal plane one meter (3.3 feet) above the deck that is—
- (1) 54 lux (five foot-candles) at any loading flange; and
- (2) 11 lux (one foot-candle) at each work area.
- (d) The emergency lighting must provide lighting for the operation of the—
 - (1) Emergency shutdown system;
 - (2) Communications equipment; and
 - (3) Firefighting equipment.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39795, Aug. 3, 1995]

§ 127.111 Communications systems.

(a) The marine transfer area for LNG must have a ship-to-shore communica-

tion system and a separate emergency ship-to-shore communication system.

(b) Each ship-to-shore communication system must be a dedicated system that allows voice communication between the person in charge of transfer operations on the vessel, the person in charge of shoreside transfer operations, and personnel in the control room.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39795, Aug. 3, 1995]

§127.113 Warning signs.

- (a) The marine transfer area for LNG must have warning signs that—
 - (1) Meet paragraph (b) of this section;
- (2) Can be seen from the shore and the water; and
 - (3) Have the following text:

Warning
Dangerous Cargo
No Visitors
No Smoking
No Open Lights

- (b) Each letter in the words on the sign must be—
 - (1) Block style;
 - (2) Black on a white background; and
 - (3) 7.6 centimeters (3 inches) high.

[CGD 78-038, 53 FR 3376, Feb. 7, 1988, as amended by CGD 88-049, 60 FR 39796, Aug. 3, 1995]

EQUIPMENT

$\S 127.201$ Sensing and alarm systems.

- (a) Fixed sensors must have audio and visual alarms in the control room and audio alarms nearby.
- (b) Fixed sensors that continuously monitor for LNG vapors must—
- (1) Be in each enclosed area where vapor or gas may accumulate; and
 - (2) Meet Section 9-4 of NFPA 59A.
- (c) Fixed sensors that continuously monitor for flame, heat, or products of combustion must—
- (1) Be in each enclosed or covered Class I, Division 1, hazardous location defined in Section 500–5(a) of NFPA 70 and each area in which flammable or combustible material is stored; and
 - (2) Meet Section 9-4 of NFPA 59A.